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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/293,297	04/16/1999	SHAWN P. MCALLISTER	1400.9801200	4690

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EXAMINER

DUONG, DUC T

ART UNIT PAPER NUMBER

2663

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/293,297

Applicant(s)

MCALLISTER ET AL.

Examiner

Duc T. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-31, 33 and 34 is/are rejected.
- 7) ☒ Claim(s) 18 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-17, 19-31, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertin et al (U.S. Patent 5,687,167) in view of Tooker et al (U.S. Patent 6,446,079 B2).

Regarding to claims 1, 12, and 23, Bertin discloses a link characteristic processor (Fig. 3) comprising a processing module 305 and memory 306 operably coupled to the processing module. The memory includes operating instruction that cause the processing module to determine connection type characteristics for a link (col. 6 lines 5-14), wherein the connection type characteristics comprise partitioning of available bandwidth of the links (col. 13 lines 4-9); advertising the connection type characteristics to at least one node in the network (col. 6 lines 14-26); and utilizing, by the at least one node, the connection type characteristics for selecting a routing path within the network for a connection (col. 6 lines 43-57).

Bertin fails to teach for the link is between switched virtual connections and soft permanent virtual connections.

However, Tooker discloses an ATM switching network using both switched virtual connection SVC and semi-permanent virtual connection SPVC (Fig. 1 col. 3 lines 5-18).

Thus, it would have been obvious to one of ordinary skilled in the art, at the time of the invention, to include the use of both switched virtual connection SVC and semi-permanent virtual connection SPVC as taught by Tooker in Bertin's system with the motivation to accommodate different types of network protocol, such as X.25 and ATM.

Regarding to claim 2, Bertin discloses a routing path within the network for a connection based on the connection type characteristics (col. 6 lines 30-33).

Regarding to claims 3 and 24, Bertin discloses detecting a change in the link, wherein the change produces altered connection type characteristics, and advertising the altered connection type characteristics (col. 8 lines 43-54).

Regarding to claims 4 and 25, Bertin discloses the connection type characteristics is performed by a localized node coupled to the link (col. 5 lines 5-7).

Regarding to claims 5, 6, 26, and 27, Bertin discloses broadcasting the connection type characteristics to each nodes in the network (col. 13 lines 13-17).

Regarding to claim 7, Bertin discloses compiling connection type characteristics for a plurality of links within the network to produce a characteristic data set, wherein selecting the routing path further comprises selecting the routing path using the characteristic data set (Fig. 5 col. 8 lines 56-67).

Regarding to claim 8, Bertin discloses comparing characteristics of a connection request with the characteristic data set, wherein the routing path is provided in response to the connection request (col. 10 lines 37-47).

Regarding to claim 9, Bertin discloses compiling the connection type characteristics for the plurality of links with additional network characteristics (col. 10

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lines 48-62) to produce the characteristic data set (priority groups), and see col. 14 lines 50-64.

Regarding to claim 10, Bertin discloses the connection type characteristics include information indicating likelihood of establishing the connection using the link, wherein the connection has a connection type (col. 9 lines 2-7).

Regarding to claims 11, 20, and 21, Bertin discloses the connection type of the connection is one of a plurality of connection types, wherein the plurality of connection types includes a plurality of priority levels that determine prioritization of connections (col. 13 lines 64-67).

Regarding to claims 13 and 19, Bertin discloses the connection type of the connection is one of a plurality of connection types, wherein the plurality of connection types includes a plurality of user connection types, wherein bandwidth on the link is partitioned between different user connection types (Fig. 4 col. 20-29).

Regarding to claim 14, Bertin discloses sending a call setup sequence to establish the connection along the routing path (col. 12 lines 64-67).

Regarding to claims 15, 28, and 29, Bertin discloses a connection processor (Fig. 3) comprising a processing module 305 and memory 306 operably coupled to the processing module. The memory includes operating instruction that cause the processing module to receive a connection request that includes a plurality of parameters, wherein the plurality of parameters includes a receiving party and a connection type characteristic (Fig. 1 col. 12 lines 64-67); compare the plurality of parameters with a table that stores network parameters to produce a first routing path to

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the receiving party (Fig. 1 col. 13 lines 1-3), wherein the network parameters include links within the network and corresponding connection type characteristic capabilities for the links, wherein the connection type characteristics comprise partitioning of available bandwidth of the links (col. 13 lines 4-9); and establish the connection along the first routing path (col. 12 lines 9-25).

Bertin fails to teach for the link is between switched virtual connections and soft permanent virtual connections.

However, Tooker discloses an ATM switching network using both switched virtual connection SVC and semi-permanent virtual connection SPVC (Fig. 1 col. 3 lines 5-18).

Thus, it would have been obvious to one of ordinary skilled in the art, at the time of the invention, to include the use of both switched virtual connection SVC and semi-permanent virtual connection SPVC as taught by Tooker in Bertin's system with the motivation to accommodate different types of network protocol, such as X.25 and ATM.

Regarding to claims 16, 17, 30, and 31, Bertin discloses if establishing the connection along the first routing path is unsuccessful, compare the plurality of parameters with the table that stores network parameters to produce at least a second routing path to the receiving party, and establishing the connection along the second routing path (col. 15 lines 1-5).

Regarding to claims 22 and 33, Bertin discloses establishing the connection along the first routing path comprises sending a designated transit list to each node along the first routing path (col. 13 lines 12-17).

***Claim Rejections - 35 USC § 102***

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 34 is rejected under 35 U.S.C. 102(b) as being anticipated by Bertin.

Regarding to claim 34, Bertin discloses a link characteristic processor (Fig. 3) comprising a processing module 305 and memory 306 operably coupled to the processing module. The memory includes operating instruction that cause the processing module to determine connection type characteristics for a link within the network (col. 6 lines 5-14), wherein the connection type characteristics comprise partitioning of available bandwidth of the links (col. 13 lines 4-9); advertising the connection type characteristics to at least one node in the network (col. 6 lines 14-26); and utilizing, by the at least one node, the connection type characteristics for selecting performing a network function, wherein utilizing further comprises selecting, by the at least one node, a routing path within the network for a connection based on the connection type characteristics (col. 6 lines 43-57); detecting a change in the link, wherein the change produces altered connection type characteristics (col. 7 lines 38-43); advertising the altered connection type characteristic (col. 7 lines 43-51); and compiling connection type characteristics for a plurality of links within the network to produce a characteristic data set, wherein selecting the routing path further comprises selecting the routing path using the characteristic data set (Fig. 5 col. 8 lines 56-67), wherein selecting the routing path further comprises comparing characteristics of a

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connection request with the characteristic data set, wherein the routing path is provided in response to the connection request (col. 10 lines 37-47), wherein compiling further comprises compiling the connection type characteristics for the plurality of links with additional network characteristics (col. 10 lines 48-62) to produce the characteristic data set (priority groups), and see col. 14 lines 50-64.

***Response to Arguments***

5. Applicant's arguments filed September 22, 2003 have been fully considered but they are not persuasive. In response to applicant's argument with respect to claims 1, 12, 15, 23, 28, and 29 that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Though in this case, the suggestion is not mentioned in Tooker, but is it understand to one of skill in the art using the SVCs and SPVCs links in ATM or frame relay network enable the network to setup a connections on-demand without the aid of a centrally management platform and are thus, more robust and efficient than PVCs. Regarding to applicant's argument that Bertin fails to teach for the connection type characteristic comprising partitioning of available bandwidth of the link is directed to previously cited portion, col. 13 lines 4-9. Herein,



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Bertin discloses for a bandwidth reservation process uses to reserve (partitioning) bandwidth the link.

Regarding to applicant's argument on page 2 with respect to claim 2, Bertin fails to teach connection type characteristic is directed to previously cited portion, col. 6 lines 30-33.

Regarding to applicant's argument on page 2 with respect to claims 3 and 24, Bertin fails to teach detecting a change in the link, wherein the change produces altered connection type characteristics, and advertising the altered connection type characteristics is directed to previously cited portion, col. 8 lines 43-54.

Regarding to applicant's argument on page 2 with respect to claims 4 and 25, Bertin fails to teach the connection type characteristics is performed by a localized node coupled to the link is directed to col. 5 lines 5-7.

Regarding to applicant's argument on page 2 with respect to claims 5, 6, 26, and 27, Bertin fails to teach broadcasting the connection type characteristics to each nodes in the network is directed to col. 13 lines 13-17.

Regarding to applicant's argument on page 3 with respect to claim 7, Bertin fails to teach compiling connection type characteristics for a plurality of links within the network to produce a characteristic data set, wherein selecting the routing path further comprises selecting the routing path using the characteristic data set is directed to Fig. 5 col. 8 lines 56-67.

Regarding to applicant's argument on page 3 with respect to claim 8, Bertin fails to teach comparing characteristics of a connection request with the characteristic data

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set, wherein the routing path is provided in response to the connection request is directed to col. 10 lines 37-47.

Regarding to applicant's argument on page 3 with respect to claim 9, Bertin fails to teach compiling the connection type characteristics for the plurality of links with additional network characteristics to produce the characteristic data set is directed to col. 14 lines 50-64.

Regarding to applicant's argument on page 3 with respect to claim 10, Bertin fails to teach the connection type characteristics include information indicating likelihood of establishing the connection using the link, wherein the connection has a connection type is directed to col. 9 lines 2-7.

Regarding to applicant's argument on page 3 with respect to claims 11, 20, and 21, Bertin fails to teach the connection type of the connection is one of a plurality of connection types, wherein the plurality of connection types includes a plurality of priority levels that determine prioritization of connections or a plurality of user types is directed to col. 13 lines 64-67.

Regarding to applicant's argument on pages 3-4 with respect to claims 13 and 19, Bertin fails to teach the connection type of the connection is one of a plurality of connection types, wherein the plurality of connection types includes a plurality of user connection types, wherein bandwidth on the link is partitioned between different user connection types is directed to Fig. 4 col. 20-29.

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Regarding to applicant's argument on page 4 with respect to claim 14, Bertin fails to teach sending a call setup sequence to establish the connection along the routing path is directed to col. 12 lines 64-67.

Regarding to applicant's argument on page 4 with respect to claims 16, 17, 30, and 31, Bertin fails to teach if establishing the connection along the first routing path is unsuccessful, compare the plurality of parameters with the table that stores network parameters to produce at least a second routing path to the receiving party, and establishing the connection along the second routing path is directed to col. 15 lines 1-5.

Regarding to applicant's argument on page 4 with respect to claims 22 and 23, Bertin fails to teach establishing the connection along the first routing path comprises sending a designated transit list to each node along the first routing path is directed to col. 13 lines 12-17.

Regarding to applicant's argument on page 4 with respect to claim 34 is directed to the previously cited portions.

Based on the reasons set forth above, the rejection remains held.

***Allowable Subject Matter***

6. Claims 18 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

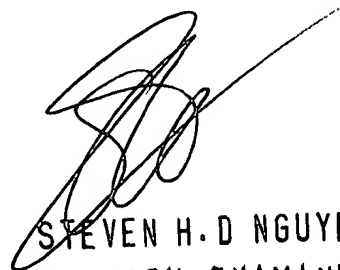
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc T. Duong whose telephone number is 703-605-5146. The examiner can normally be reached on M-Th (8:30 AM-5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

DD

November 19, 2003



STEVEN H. D NGUYEN  
PRIMARY EXAMINER